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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,730	09/24/2003	Richard D. Bednar	7016R-000010/COB	6411
27572	7590	05/12/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			VANAMAN, FRANK BENNETT	
P.O. BOX 828			ART UNIT	
BLOOMFIELD HILLS, MI 48303			PAPER NUMBER	

3618

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/669,730

Applicant(s)

BEDNAR, RICHARD D.

Examiner

Frank Vanaman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/5/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

1. The foreign reference cited in applicant's information disclosure statement, filed March 5, 2004, has not been considered due to the temporary unavailability of the parent application to the examiner. At such time as the parent application becomes available, the foreign reference will be considered. The remaining cited references have been considered, as evidenced by the notation on the PTO-1449 form listing the references of interest.

## Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) which do not appear to be mentioned in the description: numeral 192 (figure 5). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "198" has been used to designate ~~both~~ caster wheels (figure 1), a fuel tank (figures 1, 2) and a control for a variable pump (figure 5). Also note page 13 of the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

FBV

## Specification

4. The abstract of the disclosure is objected to for the following: on line 9, it is not entirely clear what is meant by “seemingly independent”. Correction is required. See MPEP § 608.01(b).

### Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, 7, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Griffin (US 4,301,881). Griffin teaches a turf mower having a base (1) mounted on a plurality of wheels (3, 4, 5) with an operator chair (9) and interface (S1, S2, S3), an engine (15) which drives a hydraulic pump (P100) operating in only one direction, a first valve set (V7) having an inlet (V7:P) connected to the outlet of the pump, a first outlet (V7:B) and second outlet (V7:T), a first hydraulic motor (HM1) having an inlet (24) connected to the first outlet of the valve set (V7:B) and an outlet connected to a second inlet of the first valve set (V7:A); a second valve set (V207) having an inlet (V207:P) connected to the second outlet of the first valve set (V7:T), a second outlet (V207:T) connected to the input of the pump (through 19, 13 and 50—note col. 3, lines 52-57); a second hydraulic motor (HM101) having an inlet (224) connected to the first outlet (V207:B) of the second valve set, thus connecting the motors and pump in a series configuration, the second valve set having a second inlet (V207:A) to which the outlet (227) of the second motor is connected, each of valves 7 and 207 controlling flow direction and having three modes: a neutral mode as shown in figure 2, and forward and reverse modes, each actuatable separately by valve control elements (respective forward and reverse coils, operated by control lines 66, 73, 82, 88), a left operable control corresponding to an operation of the left valve (V7) by control lines 66, 73; an operable control corresponding to an actuation of the second valve (V207) by control lines 82, 88, the pump being a variable capacity pump (note figure 2) having a controllable capacity.

**Claim Rejections - 35 USC § 103**

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griffin (cited above). The reference to Griffin is discussed above and fails to teach the provision of a clutch between the engine and the pump. The provision of a clutch to separate the engine of a vehicle from the working elements which draw power from the engine is old and well known, and as such, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a clutch to separate the pump and engine for the purpose of allowing the engine to be started with no load.

9. Claims 2, 4, 5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griffin in view of Porta (US 4,235,297). The reference to Griffin is discussed above and fails to teach the valves as being capable of regulating volume as well as flow direction. Porta teaches a valve control scheme (114, 115, 116; 118, 119, 120), wherein incremental volume flow through the valves may be controlled by a control device (12; 76). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the non-incremental solenoid-based valve controls taught by Griffin with an incrementally adjustable pilot valve scheme as taught by Porta for the purpose of providing a greater resolution in controlling the vehicle speed and direction.

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Griffin in view of Yamaoka et al. (US 4,809,796, cited by applicant). The reference to Griffin is discussed above and fails to teach the provision of a clutch between the engine and cutter blades. Yamaoka et al. teach a mower wherein an engine drives a set of cutter blades through a power take-off clutch (29) which selectively drives a pulley (30) and

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belt (31) which in turn drives the blades. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a power take-off clutch as taught by Yamaoka to allow selective driving of the blades of the mower of Griffin, for the purpose of allowing the vehicle to be run without the mower blades constantly running (e.g., under conditions where cutting is not needed or not desirable).

### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hunck (US 3,894,606), Bednar et al. (US 5,915,496), Reed (US 6,135,231), Martin et al. (US 6,230,829), Cunningham (US 6,675,575), "Belorussian Poly." (SU 1,337,288), and Pierre Francois (FR 2,664,553) teach drive schemes of pertinence.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 703-308-0424. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is 703-308-1113.

As of May 1, 2003, any response to this action should be mailed to:

Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450,

Or faxed to one of the following fax servers:

Regular Communications/Amendments: 703-872-9326  
After Final Amendments: 703-872-9327  
Customer Service Communications: 703-872-9325

**F. VANAMAN**  
**Primary Examiner**  
**Art Unit 3618**



5/6/04